Testæ osseæ mensura.

	unc.	lin.
Longitudo dorsi	10	2
Latitudo ejusdem	8	0
Altitudo	6	4
Longitudo sterni	9	5

The synonyms of this beautiful species are involved in some obscurity, and I have carefully avoided inserting any which appeared doubtful. It was first described by Grew in his account of the rarities in the Museum of the Royal Society, in which work it is well figured. Daudin, ignorant of this book, describes it as a new species, and gives it the name of *T. Coui;* but as Shaw had already applied to it the appropriate name of *radiata*, it has been retained by most subsequent authors. Merrem however considers it as identical with *T. calcarata* of Schneider, and makes the specific character to depend upon a circumstance which never occurs in this species, namely the existence of two spurs on the thighs. Mr. Gray*, misled doubtless by this error, describes a tortoise in the Paris Museum as a variety of the present species, "ano bicalcarato." There is not however the slightest appearance of such a character in any individual which I have seen; and the only species in fact to which it would be strikingly applicable is *T. pardalis*, to which the term *calcarata* may possibly have been, in the first instance, applied. There are however two large strong horny scales at the heel of each hinder foot, which I consider as a good specific character.

By an unaccountable oversight, Mr. Gray has given, as one of the specific characters of this species, "scutello nuchali nullo;" whereas the nuchal plate is comparatively very large and projecting.

There is no possibility of confounding *T. radiata* with any other species. The extraordinary elevation, and especially the spherical form of the shell, exclusive of the characters of the other parts, are at once sufficient to distinguish it. Although the colours are the same as in *T. geometrica, actinodes*, and

* Syn. Rept. p. 11.

tentoria, and although, as in these species, the yellow markings and lines are disposed in radii, yet there are some remarkable peculiarities, even in this respect, which it may be useful to particularize. One of the most striking of these is that all the yellow radii, which in *T. geometrica* are linear, have, in this species, a remarkable disposition to expand towards the circumference. The proportional quantity of yellow varies exceedingly in different specimens, not only from the different breadth, but also from the variable number of the radii; but however they may differ in this respect, there are certain characters about the direction of the markings and the essential existence of some of them, which are at once so constant and so characteristic as to require a more detailed description.

The areolæ are, without exception, yellow or yellowish brown, and the radii spring from them as from a centre, and pass straight to the circumference, expanding regularly to their termination. They do not, as in *geometrica*, accurately meet those of the contiguous plates. The first vertebral scutum has always one ray at each of the four principal angles, and often a few smaller ones on the hinder section: in the second and third, the radii are more numerous, but almost entirely restricted to the sides, towards the costal plates: the fourth has the lateral and posterior segments occupied by them, with very few and slender ones on the anterior: those of the fifth are restricted to the anterior and posterior segments. The first costal plate has two small rays in the direction of the two superior angles, and numerous broader ones extending to the marginal plates: the second and third have three passing to the three superior angles, and four or more downwards to the margin: the fourth has two superior and several inferior rays; but in the costal plates there is scarcely a trace of rays passing laterally from one to the other. The rays of the marginal plates are directed upwards from the areolæ, which are placed at the very margin of the shell; they spread upwards in the shape of a fan, diverging as well as expanding to their termination. The nuchal plate has in some specimens one slender ray; in others it is wholly black. The caudal follows the rule of the marginal plates. In the sternum, the yellow colour obtains much more considerably than on the upper shell. The gular plates are almost wholly yellow, excepting a small ray or two of black, and, with the yellow